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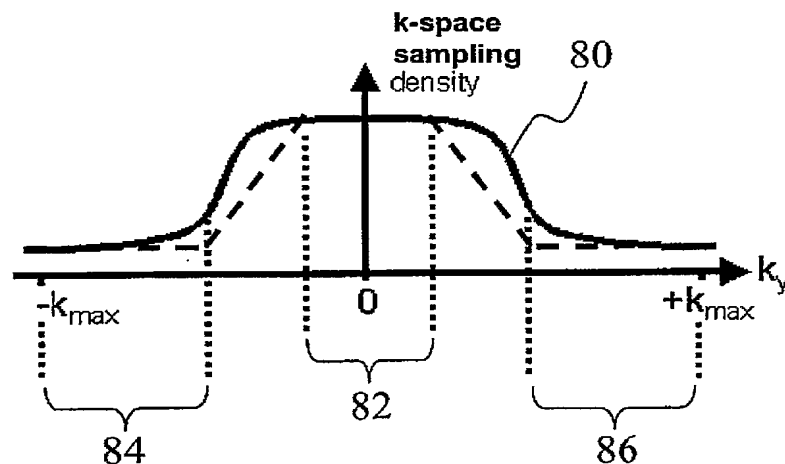
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(54) Title: REGULARIZED VARIABLE DENSITY SENSE



(57) Abstract: A magnetic resonance imaging apparatus includes a plurality of radio frequency coils (34) that acquire variable density sensitivity encoded data that is undersampled at least away from the center of k-space. A reconstruction processor (52) for each coil reconstructs: a regularization image reconstructed from a higher density portion of the variable density sensitivity encoded data disposed at or near a center of k-space acquired by that coil; and a folded image reconstructed from the variable density sensitivity encoded data acquired by that coil. An unfolding processor (66) unfolds the folded images. The unfolding is regularized by the regularization images.

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